

What is claimed is:

1. An automatic medium changer comprising:

a casing having an openable door, wherein
a medium storing unit storing a plurality of information
storage media, a read/write unit reading data from and
5 writing data into the information storage media and a
carrier which reciprocates between the medium storing unit
and the read/write unit;

a lock mechanism which is capable of locking the door
to the casing so as to be in an unopenable state; and

10 a mechanical auto lock/unlock mechanism, and

the mechanical auto lock/unlock mechanism causes the
lock mechanism to be in an unlocked state when the carrier
is located at an evacuation position and causes the lock
mechanism to be in a locked state when the carrier moves
15 from the evacuation position to a normal operational area.

2. The automatic medium changer, as claimed in claim
1, wherein

the lock mechanism comprises an engagement portion
formed on the door and a lock pin provided in the casing,

5 the auto lock/unlock mechanism comprises an elastic
urging means urging the lock pin in a direction of engaging
a tip portion of the lock pin with the engagement portion,
and a lever moving the lock pin in a direction of
disengaging the tip portion of the lock pin from the

10 engagement portion, and

the lever is disposed at a position where the lever is operated with a pressure applied by the carrier moving from the normal operational area to the evacuation position.

3. The automatic medium changer, as claimed in claim 2, wherein the lever is so configured as to oscillate with a pressure applied by the carrier to thereby move the lock pin.

4. The automatic medium changer, as claimed in claim 2, wherein the lever comprises a linear movement member formed integral with the lock pin.

5. The automatic medium changer, as claimed in claim 1, wherein the lock mechanism comprises an engagement portion formed on the door and a stopping pawl formed on one end of an oscillation lever provided in the casing,

5 the auto lock/unlock mechanism comprises an elastic urging means rotationally urging the oscillation lever in a direction of engaging the stopping pawl with the engagement portion, and a pressure receiving portion located on the oscillation lever which, by receiving a force from an
10 outside, oscillates the oscillation lever in a direction of disengaging the stopping pawl from the engagement portion, and

the oscillation lever is disposed at a position where the pressure receiving portion is pressed by the carrier

15 moving from the normal operational area to the evacuation position.

6. The automatic medium changer, as claimed in claim 2, wherein the lever includes an emergency manipulation portion with which the lever is moved against an urging force applied by the elastic urging means, and

5 the casing has a small hole perforated manipulating the emergency manipulation portion from an outside.

7. The automatic medium changer, as claimed in claim 2, wherein the elastic urging means is formed of a coil spring.

8. The automatic medium changer, as claimed in claim 2, wherein the elastic urging means is formed of a helical torsion spring.

9. The automatic medium changer, as claimed in claim 1, wherein in the casing, an unlock switch requesting the lock mechanism to unlock, an open/close state detecting sensor confirming an open/close state of the door, and a
5 controller controlling a driving source of the carrier are arranged in juxtaposition, and

the controller is provided with an evacuation instruction output means, upon receipt of an unlock signal from the unlock switch, outputting to the driving source an
10 evacuation position moving instruction, and a return instruction output means, when confirming that a door

opening confirmation signal and a door closing confirmation signal from the open/close state detecting sensor are received in this order, outputting to the driving source a
15 home position return instruction.

10. The automatic medium changer, as claimed in claim 9, wherein a function of the controller is served by a control unit drive-controlling the automatic medium changer as a whole.

11. The automatic medium changer, as claimed in claim 1, wherein the evacuation position of the carrier is set at a position outside a space formed between the door and the medium storing unit.